

MY MEAL INTAKE TOOL: GUIDANCE DOCUMENT

The Canadian Malnutrition Task Force (CMTF) conducted a cohort study (2010–2013) in over 1000 adult patients, recruited from 18 acute care hospitals in 8 provinces. This Nutrition Care in Canadian Hospitals (NCCH) study identified not only the prevalence of malnutrition, but also that several hospital processes affected the ability of patients to consume adequate food for their recovery. The NCCH study identified that food intake, regardless of nutritional status at admission, independently predicted the length of stay of a patient. Specifically, patients who consumed less than 50% of food provided at meals had longer lengths of stay. As a result, food intake is the key monitoring mechanism used in the Integrated Nutrition Pathway for Acute Care (INPAC) to determine when a patient requires more Advanced or Specialized Nutrition care. A food estimation tool needs to be simple enough for all medical and surgical patients to use.

In the NCCH study, food intake and challenges to food intake were collected using a patient-completed nutritionDAY™ food intake form and an in-depth food-access questionnaire. Although very basic, this estimation was sufficient to identify potential problems with intake. The My Meal Intake Tool (MMIT) was created to be a simple patient-administered meal intake record that captures the most common food access issues identified in the NCCH study. The validity and ease of completion of MMIT were tested (2014/2015) in 120 patients over the age of 65 years from 4 diverse hospitals. Sensitivity and specificity of food and fluid estimations were determined by comparing patient estimation to an auditor's recording of intake; MMIT was found to have adequate validity (sensitivity and specificity >70%). Minor modifications were completed after the study to promote clarity and usability of the form. English and French versions are available.

The INPAC recommends that food intake be assessed:

- 1. At a single meal, twice per week for patients receiving Standard Nutrition Care (e.g., day 3 and day 7 of admission)**
- 2. At a single meal, at least once per day for patients receiving Advanced Nutrition Care**

The form has been developed and tested with vulnerable patients, but does require sufficient cognition to complete. If a patient has delirium, or is presenting with cognitive or memory problems, then family, friends or staff should complete the form on the patient's behalf.

Recommendations for the use of MMIT

1. The hospital computerized tray/meal system can be programmed with Standard and Advanced care strategies with respect to monitoring food intake, whereby patients will receive the MMIT on their meal tray on selected dates (e.g., day 3 and 7 of admission for a Standard Nutrition Care patient; every lunch for an Advanced Nutrition Care patient).
2. When the meal is delivered to the patient, the staff member will notify the patient that they are being asked to record their food and fluid intake so that the staff can better monitor their nutrition needs.
3. If family is present at the meal, they can also complete this form with/for the patient.
4. If the form has not been completed when the tray is removed from the patient's bedside, the staff member can remind the patient to complete it.
5. If the patient is unable to complete the form, the staff member retrieving the tray can help the patient complete the form by asking them about their intake or by observing what is remaining on the tray and at bedside. If the staff member completes the form, they should check the appropriate box at the end of the questionnaire, indicating that staff has assisted in completion of the form.



Recommendations for the use of MMIT (cont'd.)

6. Diet technicians, health care aides, other staff and/or volunteers can also be trained to complete this form with the patient; a specific process should be developed within the hospital to promote routine completion.
7. A process within the unit/hospital should be developed to analyze these forms on a daily basis to determine if a patient needs to be moved to Advanced or Specialized nutrition care as per INPAC.
8. Patients receiving Specialized Nutrition Care may require a more detailed assessment of their oral intake and/or nutritional support; MMIT should be considered a minimum for monitoring of oral intake.

Instructions for completing MMIT

1. Patient's name and room number are required so that the MMIT can become part of the patient record.
2. Patients list all beverages present at the meal in the spaces provided. The placing of an 'X' in the correct bubble indicates consumption of each beverage during the meal. If fluids are left on the tray but not consumed, they are also listed here with an 'X' placed in the 0% bubble. Some patients may drink fluids from a prior meal or have beverages brought in by family members. It is appropriate to include these additional items here if they are consumed as part of the meal, as total beverage intake at mealtime is the priority of this record.
3. Food on the tray is assessed as total overall consumption of foods provided. An 'X' is placed in the correct bubble to indicate consumption of foods from the tray.
4. If any item – not consumed during mealtime – is saved for later by the patient, it should be listed on the bottom of the first page. Beverages listed here as 'saved for later' should not appear in the beverage list above.
5. The second page identifies if the patient has a poorer than usual appetite and reasons why this may be the case. The patient can provide as many reasons as they feel are contributing to their poor appetite.
6. In addition to poor appetite, challenges are also listed on the second page. The patient can identify as many challenges as they experienced. If they had no challenges at the meal, they can tick the final box listed.
7. A comment section on page 2 gives the patient the opportunity to identify any other concerns they may have about the food and mealtimes.
8. The person completing the form (patient, family/friend, staff or volunteer) identifies his/herself by checking off the correct box at the bottom of the second page.

Interpretation of MMIT

1. MMIT is only the starting point for understanding food intake of patients, as it is a crude estimation. **Consumption less than 50% of overall food on the tray (e.g., main plate, side dishes, etc.) indicates that further investigation and intervention are required to promote better intake and recovery of patients.** This value is used in the INPAC as a trigger for changing nutrition care practices for the patient.
2. If beverage consumption is poor, interventions to prevent dehydration may be required.
3. Food and beverages saved for later are not considered in the estimation of food and fluid intake. The intake of this saved food/beverage is not recorded/confirmed by the patient on this record, and thus cannot be included in the estimation.

